



Contents

00 - Technical data	1
1 Technical data	1
1.1 Lupo 3 L	1
1.2 Lupo FSI	2
1.3 Lupo GTI	3
2 Brake test	4
2.1 General	4
2.2 Test	4
45 - Anti-lock brake system	5
1 ABS Mark 30 IE and ABS/EDL/TCS/ESP Mark 20 IE anti-lock brake system	5
1.1 ABS Mark 30 IE anti-lock brake system	5
1.2 ABS/EDL/TCS/ESP Mark 20 IE anti-lock brake system	6
1.3 What to remember when carrying out repairs on ABS Mark 30 IE and ABS/EDL/TCS/ESP Mark 20 IE	6
2 Connecting VAS 5051 and selecting functions	8
3 Electrical and electronic components and locations (ABS, ABS/EDL)	10
4 Faults displayed by warning lamps for ABS, ABS/EDL	12
5 Electrical and electronic components and locations (ABS/EDL/TCS/ESP)	13
6 Faults displayed by warning lamps, ABS/EDL/TCS/ESP	16
7 Assembly overview - hydraulic unit, brake servo/brake master cylinder	18
7.1 Assembly overview, ABS Mark 30 IE - hydraulic unit, brake servo/brake master cylinder	18
7.2 Removing and installing control unit and hydraulic unit, ABS MARK 30 IE	21
7.3 Assembly overview, ABS/EDL/TCS/ESP Mark 20 IE - hydraulic unit, brake servo/brake master cylinder	24
7.4 Removing and installing control unit and hydraulic unit, ABS/EDL/TCS/ESP Mark 20 IE ..	28
8 Removing and installing parts of ABS system on front and rear axle	32
8.1 Removing and installing parts of ABS system on front axle, Lupo 3 L	32
8.2 Removing and installing parts of ABS system on rear axle, Lupo 3 L	35
8.3 Removing and installing parts of ABS system on front axle, Lupo FSI and Lupo GTI	38
8.4 Removing and installing parts of ABS system on rear axle, Lupo FSI and Lupo GTI	42
9 Removing and installing parts of ESP system	46
9.1 Removing and installing yaw rate sender G202 and lateral acceleration sender G200 ..	46
9.2 Removing and installing steering angle sender G85	47
46 - Brakes - mechanism	48
1 Repairing front brakes	48
1.1 Repairing front brakes, FS I - AL brake calipers, Lupo 3 L	48
1.2 Removing and installing brake pads	49
1.3 Removing and installing AL brake caliper FS I	51
1.4 Repairing front brakes, Lucas brake caliper, Lupo FSI and Lupo GTI	53
1.5 Removing and installing brake pads, Lucas brake caliper	54
1.6 Removing and installing Lucas brake calipers	56
2 Repairing rear brakes, drum brakes	58
2.1 Removing and installing rear brakes, Lupo 3 L	58
2.2 Releasing brake shoe adjustment	60
2.3 Repairing rear brakes	61
2.4 Removing and installing brake shoes	62
3 Repairing rear brakes (disc brakes)	65
3.1 Repairing rear brakes, Lupo FSI and Lupo GTI	65
3.2 Removing and installing brake pads	66



3.3	Removing and installing brake caliper	69
4	Assembly overview - handbrake lever	71
4.1	Removing and installing handbrake cable (drum brakes)	71
4.2	Adjusting handbrake (drum brakes)	73
4.3	Removing and installing handbrake cable (disc brakes)	74
4.4	Adjusting handbrake (disc brakes)	76
5	Assembly overview - brake pedal	77
5.1	Vehicles with mechanical steering, Lupo 3 L	77
5.2	Vehicles with electromechanical servo steering, Lupo 3 L	82
5.3	Vehicles with mechanical and hydraulic steering, Lupo FSI and Lupo GTI	89
47	Brakes - hydraulics	94
1	Repairing front brake calipers	94
1.1	FS I - AL brake caliper, Lupo 3 L	94
1.2	Removing and installing front brake caliper piston	94
1.3	Lucas brake caliper, Lupo FSI and Lupo GTI	97
1.4	Removing and installing front brake caliper piston	98
2	Repairing rear brake caliper	101
2.1	Removing and installing piston for rear brake caliper	102
2.2	Pressure leak test	104
3	Bleeding brake system	105
3.1	Bleeding brake system using brake filling and bleeding unit VAS 5234 or V.A.G 1869	105
3.2	Bleeding brake system without brake filling and bleeding appliance	107
3.3	Changing brake fluid	107
4	Assembly overview - brake master cylinder/brake servo	108
4.1	Checking non-return valve :	109
4.2	Removing and installing brake pressure switch F270	109
5	Assembly overview - brake master cylinder/brake servo for vehicles with ABS/EDL/TCS/ESP	111
5.1	Removing and installing brake pressure sender from brake master cylinder	112
6	Removing and installing brake master cylinder	114
6.1	Removing	114
6.2	Installing	114
7	Removing and installing brake servo	115
7.1	Removing	115
7.2	Installing	116
8	Repairing brake lines	117
8.1	Assembly overview - flanging tool	119
8.2	Work instructions	119